

Science Toolkit: Grade 7 Objective 3.C.1.e

Student Handout: Science: Grade 7 Objective 3.C.1.e

Standard 3.0 Life Science

Topic C. Genetics

Indicator 1. Explain the ways that genetic information is passed from parent to offspring in different organisms.

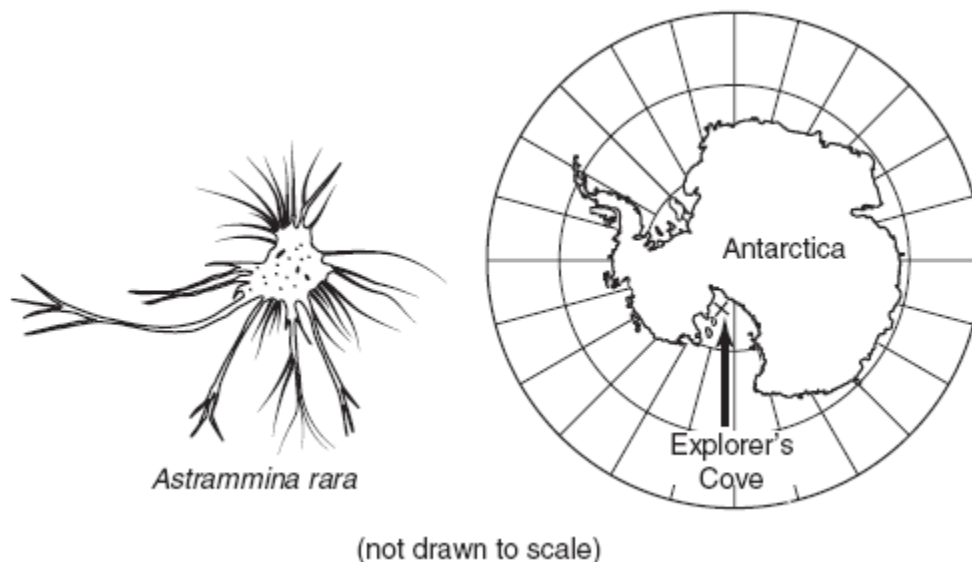
Objective e. Identify evidence to support the idea that there is greater variation among offspring of organisms that reproduce sexually than among those that reproduce asexually.

Selected Response (SR) Item

Question

Use the information and diagrams below to answer the following.

Astrammina rara is a unicellular organism that is several millimeters long. This organism lives on the ocean floor of Antarctica in an area called Explorer's Cove. *Astrammina rara* builds a shell by cementing grains of sand from the ocean floor together. The organism either absorbs nutrients from the water or eats other organisms on the ocean floor. The offspring of *Astrammina rara* have genes identical to the parent. Below is a diagram of an *Astrammina rara* and a map showing where the organism lives.



Asexual reproduction by *Astrammina rara*

- A. involves an egg and a sperm
- B. requires a male and a female
- C. reduces the variation in the offspring
- D. increases the variation in the offspring

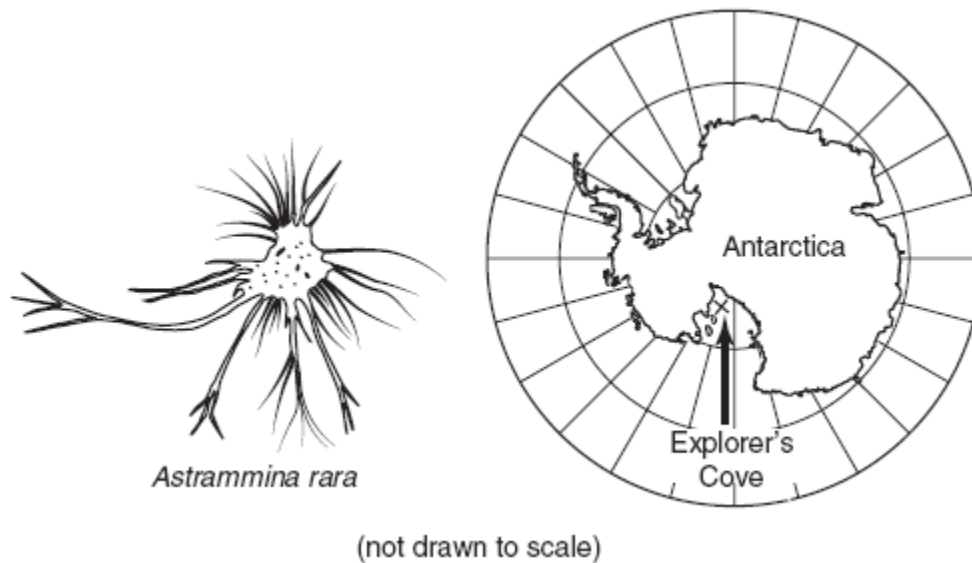
Correct Answer

C. reduces the variation in the offspring

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